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We Claim:

1. An image generating device for forming a behind object prepared with polygon data as a part of the background of a virtual three-dimensional space and generating images of movements of a character object prepared with polygon data in this virtual three-dimensional space by capturing it from a movable viewpoint, characterized in comprising:

control means for incorporating as the object of display a character object within a visual field seen from said viewpoint only when said character object is positioned in the space near said viewpoint in comparison to said behind object seen from said viewpoint.

2. An image generating device according to claim 1, characterized in that said control means comprises: visual field operation means for operating the visual field seen from said viewpoint; specifying means for specifying said behind object positioned within said visual field and observable from said viewpoint; judging means for judging the specific condition of said character object within said visual field and positioned in the space closer to said viewpoint side than said behind object specified with said specifying means; and display objectifying means for incorporating said character object as the object of display only when said specific condition is judged by said judging means.

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3. An image generating means according to claim 2, characterized in said specifying means comprising: modeling means for modeling said behind object as a behind object model of a certain shape; Z value operation means for operating the Z value between said behind object model and said viewpoint; a buffer corresponding to a plurality of areas of a simulatively divided display screen; searching means for searching said behind object model from said viewpoint via one line worth of the respective areas among said plurality of areas; and Z value storage means for storing said Z value of said behind object model initially searched by said searching means; and

said judging means comprising: a separate modeling means for modeling said character object as a model of a certain shape; a separate Z value operation means for operating the Z value between said character object model and said viewpoint; and calculation means for calculating said specific condition upon comparing the Z value of said character object model and said Z value stored in said buffer.

4. An image generating device according to claim 3, characterized in that said modeling means is means for modeling a spherical model, which is defined by a representative point of a solid body forming said behind model and a radius corresponding to the distance from said representative point to the edge of said model, as said model of a certain shape; and

said separate modeling means is means for modeling a

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spherical model, which is defined by a representative point of a solid body forming said character model and a radius corresponding to the distance from said representative point to the edge of said model, as said model of a certain shape.

5. An image generating device according to claim 3, characterized in that said simulative areas are areas dividing said display screen in a checkerboard shape, and said at least one line worth of area is formed with one row worth of area crossing said checkerboard-shaped area in the horizontal direction.

6. An image generating device according to claim 5, characterized in that said at least one row worth of area is one line worth of area approximately corresponding to the eye level seen from said viewpoint.

7. An image generating device according to claim 5, characterized in that said Z value storage means is means for storing as said Z value the default value corresponding to a remote distance set in advance to said area to which said behind object model could not be searched by said searching means.

8. An image generating device according to any one of claims 1 to 7, characterized in that said behind object is arranged in a plurality in said virtual three-dimensional space.

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9. An image generating device according to claim 8, wherein said behind object is an artificial structure in an actual space.

10. An image generating method for forming a behind object prepared with polygon data as a part of the background of a virtual three-dimensional space and generating images of movements of a character object prepared with polygon data in this virtual three-dimensional space by capturing it from a movable viewpoint, characterized in comprising the steps of:

operating the visual field seen from said viewpoint; specifying said behind object positioned within said visual field and observable from said viewpoint; judging the specific condition of said character object within said visual field and positioned in the space closer to said viewpoint side than said behind object specified with said specifying means; and incorporating said character object as the object of display only when said specific condition is judged by said judging means.

11. An image generating device for generating images with the addition of a virtual weather environment in the virtual three-dimensional space; characterized in comprising:

specifying means for specifying the current camera position in said three-dimensional space and the current time in prescribed intervals; and control means for controlling the sky, weather, and degree of weather which at least form a part of the background of the display screen in accordance with the

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camera position and current time specified by said specifying means.

12. An image generating device which requests images of components completed by arranging and structuring virtual components in a virtual three-dimensional space, characterized in comprising:

storage means for priorly storing differences of at least the type, attribute, and arranged environment of said components and parameters corresponding thereto; selection means for designating said parameters and selecting said component; and arranging means for arranging the selected component with an algorithm simulating human sensitiveness and structuring said completed component.

13. An image generating device for generating image of a virtual role-playing game in a virtual three-dimensional space, characterized in comprising:

mode ratio selection means capable of selecting the mode ratio of the time length of the manual mode in which the player advances said role-playing game in real time, and the time length of the auto mode in which the device side compulsorily advances said role-playing game.

14. An image generating device according to claim 13, characterized in that said mode ratio selection means is either means for priorly selecting said mode ratio before shipment of

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said image generating device, or means for a player to select  
said mode ratio upon starting said role-playing game.